

VOOL

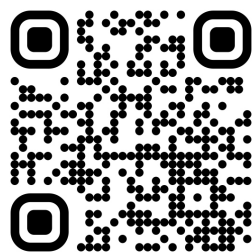
VOOL

Charge Management Controller (LMC)

Quick Start Guide

More Languages:

Partino Support



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Lokaler Partner

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DE Wir empfehlen Ihnen, vor der Installation und Inbetriebnahme des Produkts das gesamte Handbuch durchzulesen. Die Installation muss von einem zugelassenen Installateur durchgeführt werden. Befolgen Sie sämtliche lokalen Vorschriften. Scannen Sie den bereitgestellten QR-Code, um auf das vollständige Handbuch in Ihrer bevorzugten Sprache zuzugreifen.

FR Nous vous recommandons de lire l'intégralité du manuel avant d'installer et d'utiliser le produit. L'installation doit être effectuée par un installateur agréé. Suivez toutes les réglementations locales. Scannez le code QR fourni pour accéder au manuel complet dans votre langue préférée.

IT Si consiglia di leggere l'intero manuale prima di installare e utilizzare il prodotto. L'installazione deve essere effettuata da un installatore autorizzato. Seguire tutte le normative locali. Scansiona il codice QR fornito per accedere al manuale completo nella tua lingua preferita.

EN We recommend to read the entire manual before installing and operating the product. The installation must be carried out by an authorised installer. Follow all local regulations. Scan the QR code provided to access the full manual in your preferred language.

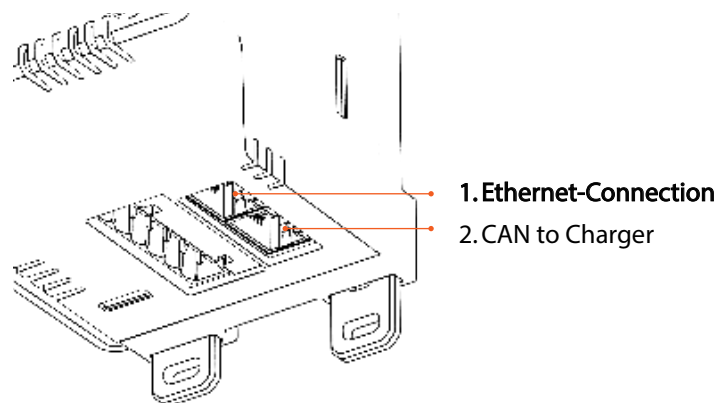
- DE
- Bitte lesen Sie diese Anleitung, bevor Sie den VOOL Load Management Controller (LMC) installieren oder warten.
 - Aus Sicherheitsgründen sollte der VOOL LMC nicht in der Nähe von entflammaren, explosiven, aggressiven oder brennbaren Materialien, Chemikalien oder Dämpfen installiert oder verwendet werden.
 - Um eine ordnungsgemäße Installation zu gewährleisten, müssen alle Installationen von einem zugelassenen Installateur durchgeführt werden. Eine unsachgemäße Installation kann den Schaltschrank beschädigen.
 - Der VOOL LMC sollte von Personen ohne ausreichende Erfahrung oder ohne ausreichendes Wissen nur unter Aufsicht einer verantwortlichen Person verwendet werden.
 - Schalten Sie den Hauptschalter aus, bevor Sie den VOOL LMC installieren.
 - Verwenden Sie den VOOL LMC nur innerhalb der angegebenen Betriebsparameter.
 - Vermeiden Sie das Einführen von Fremdkörpern in den VOOL LMC, um Schäden zu vermeiden.
 - Aus Sicherheitsgründen sollte der VOOL LMC nicht direkt Flüssigkeitsspritzern ausgesetzt werden.
 - Es ist strengstens untersagt, das Gerät oder Teile des Produkts zu verändern.
 - Verwenden Sie das Gerät aus Sicherheitsgründen nicht, wenn es beschädigt zu sein scheint.
 - Die Installationen müssen die örtlichen Vorschriften einhalten. Überschreiten Sie nicht die Stromgrenzen.
 - Bitte überprüfen Sie die Firmware und aktualisieren Sie sie auf die neueste Version, um optimale Eigenschaften und Funktionen zu gewährleisten.

- FR
- Veuillez lire ces instructions avant d'installer ou d'entretenir VOOL Load Management Controller (LMC).
 - Pour des raisons de sécurité, évitez d'installer ou d'utiliser le VOOL LMC à proximité de matériaux, de produits chimiques ou de vapeurs inflammables, explosifs, corrosifs ou combustibles.
 - Afin de garantir une installation correcte, un installateur agréé doit réaliser l'ensemble des installations. Une installation incorrecte peut endommager l'armoire électrique.
 - Les personnes n'ayant pas l'expérience ou les connaissances suffisantes ne doivent pas utiliser le VOOL LMC sans la supervision d'une personne responsable.
 - Coupez le courant à partir de l'interrupteur principal avant d'installer le VOOL LMC.
 - N'utilisez le VOOL LMC que dans le cadre des paramètres de fonctionnement spécifiés.
 - Évitez d'introduire des corps étrangers dans le VOOL LMC afin de ne pas l'endommager.
 - Pour des raisons de sécurité, évitez d'asperger directement des liquides sur le VOOL LMC.
 - Il est strictement interdit de modifier l'équipement ou toute partie du produit.
 - Pour des raisons de sécurité, n'utilisez pas l'appareil s'il semble endommagé.
 - Les installations doivent être conformes aux réglementations locales. Ne pas dépasser les limites de courant.
 - Veuillez vérifier et mettre à jour la dernière version du micrologiciel pour garantir des caractéristiques et des fonctionnalités optimales.

- IT
- Leggere le presenti istruzioni prima di installare o eseguire interventi di manutenzione sul controller di VOOL Load Management Controller (LMC).
 - Per motivi di sicurezza, evitare di installare o utilizzare il controller di gestione del carico VOOL LMC in prossimità di materiali, sostanze chimiche o vapori infiammabili, esplosivi, aggressivi e combustibili.
 - Per garantire un'installazione corretta, far eseguire l'operazione a un installatore autorizzato. Un'installazione errata può danneggiare l'armadio elettrico.
 - Il controller di gestione del carico VOOL LMC non deve essere utilizzato da utenti con mancanza di esperienza o conoscenza senza la supervisione di un responsabile.
 - Spegner l'alimentazione dall'interruttore principale prima di installare il controller di gestione del carico VOOL LMC.
 - Utilizzare il controller di gestione del carico VOOL LMC solo entro i parametri operativi specificati.
 - Evitare di inserire oggetti estranei nel controller di gestione del carico VOOL LMC per evitare danni.
 - Per ragioni di sicurezza, evitare di bagnare direttamente il controller di gestione del carico VOOL LMC con liquidi.
 - È severamente vietato modificare l'apparecchio o qualsiasi parte del prodotto.
 - Per ragioni di sicurezza, non utilizzare l'apparecchio se sembra danneggiato.
 - Le installazioni devono essere conformi alle normative locali. Non superare i limiti di corrente.
 - Controllare e aggiornare il firmware alla versione più recente per garantire caratteristiche e funzionalità ottimali.

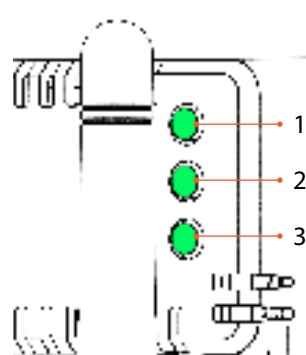
- EN
- Please read these instructions before installing, or maintaining the VOOL Load Management Controller (LMC).
 - For safety reasons, avoid installing or using the VOOL LMC near flammable, explosive, harsh, combustible materials, chemicals, or vapors.
 - To ensure proper installation, an authorized installer must carry out all installations. Incorrect installation can damage the electrical cabinet.
 - The VOOL LMC should not be used by Individuals with a lack of experience or knowledge without the supervision of a responsible party.
 - Turn off the power from the main switch before installing VOOL LMC.
 - Use the VOOL LMC only within the specified operating parameters.
 - Avoid inserting any foreign items into the VOOL LMC to prevent damage.
 - For safety reasons, avoid direct liquid showers to the VOOL LMC.
 - Modifying the equipment or any part of the product is strictly prohibited.
 - For safety reasons, do not use the equipment if it appears to be damaged.
 - The installations must comply with local regulations. Do not exceed current limitations.
 - Please check and update to the latest version of firmware to ensure optimal features and functionality.

1. Connections



1. Ethernet-Connection
2. CAN to Charger

2. Lights



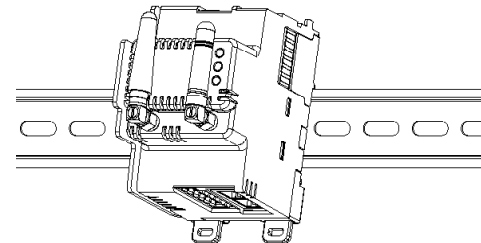
1. Power LED
Yellow - Booting
Green - Ready
2. Internet Status
Red - no Internet
Blue - Hotspot ON
Green - Internet connected
3. Status LMC
Red - not configured
Yellow - No connection to Charger
Green - Connection to Charger

Further information in the LMC installation manual

3. Mounting the LMC on a DIN rail

To avoid hazards caused by electricity, disconnect the power supply before installation. Attach the LMC to the DIN rail at the desired location.

The LMC has a size of 3.5 modules. The recommended circuit breaker for the LMC has the following characteristics 6 A, 3 P, B-curve.

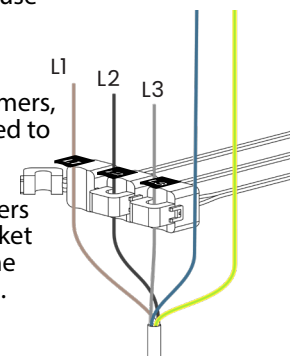


4. Connection of current transformers

The LMC is equipped with three available current transformers in configurations of 50 A, 100 A, and 250 A. Contact your local dealer if you need a model for a main fuse greater than 250 A.

These are cable conversion type current transformers, which means that no power cables need to be disconnected for installation.

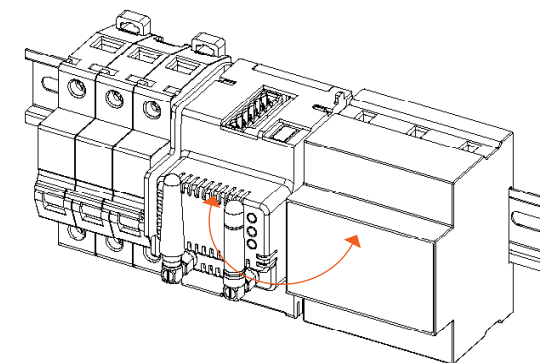
Before installing the current transformers on the cables, make sure that their socket is connected to the LMC. Otherwise, the current transformers may be damaged.



5. Installation on existing current transformers or multimeters

If current transformers are already installed in the distribution box, make sure they are compatible with the LMC before connecting them.

If an electricity meter is available on site that supports the Modbus protocol and is connected to the same network as the LMC, the measurement data can be used for charge management. Contact your local provider for compatibility information.

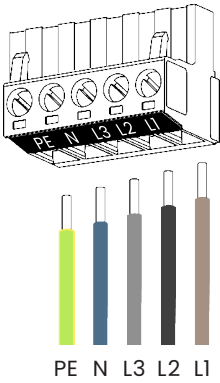


6. Connecting the power supply (AC/alternating current)

6.1 (Three phases) Connect the cables to the designated socket and the socket on the LMC.

Turn on the LMC and make sure the LEDs light up.

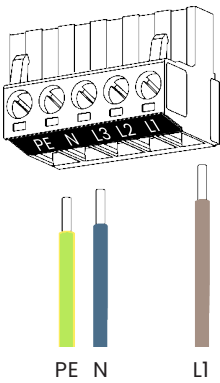
If no LEDs light up, read the section “Troubleshooting” in the installation manual.



6.2 (Three phases) Connect the cables to the designated socket and the socket on the LMC.

Turn on the LMC and make sure the LEDs light up.

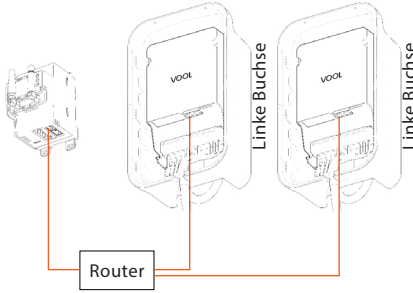
If no LEDs light up, read the section “Troubleshooting” in the installation manual.



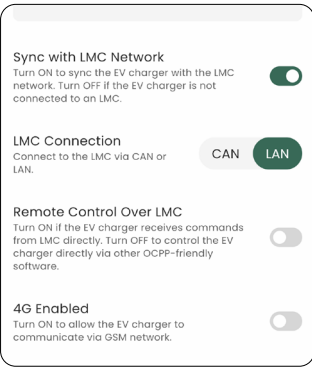
7. Connecting the LMC to chargers

Chargers can be connected to the LMC via the same LAN (Local Area Network) or via a CAN connection.

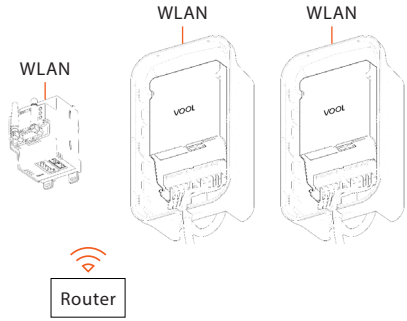
7.1.1



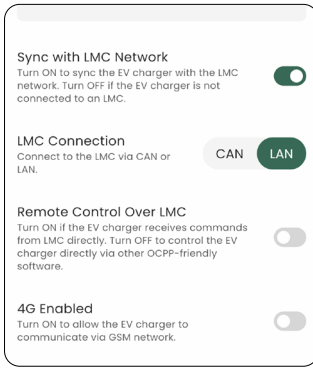
Scenario 1: The charger(s) and the LMC are connected to the same local network, with the devices connected to it via separate communication cables.



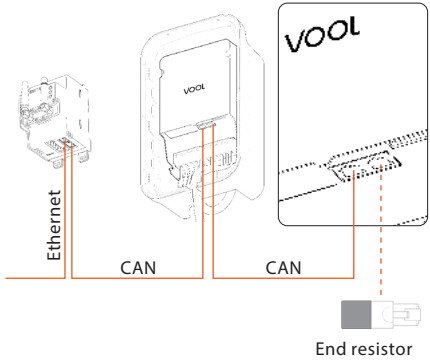
7.1.2



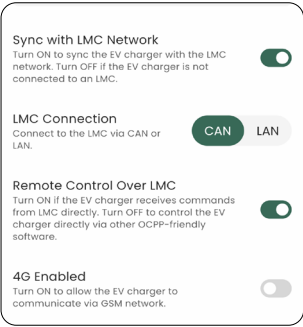
Scenario 2: The charger(s) and LMC are connected via Wi-Fi and to the same LAN.



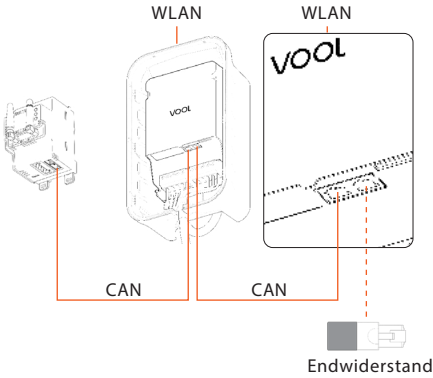
7.2.1



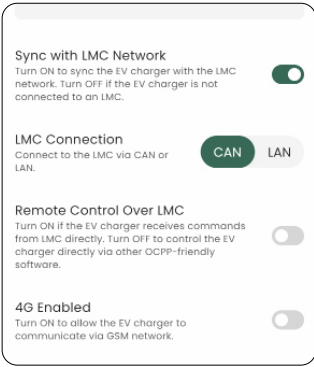
Scenario 3: Charger(s) and LMC are connected via CAN using a CAT-6 cable. The chargers do not need to be connected to the internet; they communicate with our server via CAN through the LMC. The last charger in the series must be equipped with a terminating resistor to ensure reliable communication between the devices. If necessary, you can use two parallel CAN bus lines with a Connect RJ45 three-way splitters. You can also combine Wi-Fi and CAN connections for charging management.



7.2.2



Scenario 4: Charger(s) and LMC are connected to each other via CAN and to the Internet via Wi-Fi. The last charger in the series must be equipped with a terminating resistor to ensure reliable communication between the devices. The LMC only needs to be connected to the Internet for configuration purposes.



LAN-Connection

If the LAN loses its connection to the internet but remains active locally, the devices may not be visible via the VOOL portal, but charge management will continue to function.

CAN-Connection

If only the LMC is connected to the Internet, as described in section 7.2.1, no device will be visible in the network after communication is lost. However, the LMC will continue to operate and manage the charging management function offline.

8. Ripple Control Signal

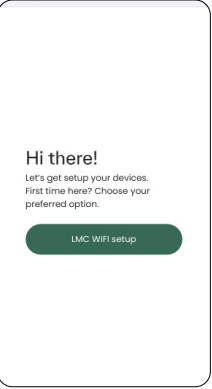
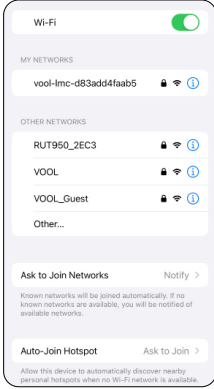
- DIN = NO/normally open contact
- GND = Ground (potential-free contact)
- GND = Ground (potential-free contact)
- A = Not assigned
- B = Not assigned



9. Connection to the VOOL network

LMC can be connected online either via an Ethernet cable or Wi-Fi.

- Ethernet:** Connect an Ethernet cable to the Ethernet port on the LMC to establish an Internet connection..
- WLAN:** After switching on, wait up to 2 minutes until the LMC finds a Wi-Fi hotspot with the name „**LMC ID123456789**“ If the Wi-Fi has already been configured, the hotspot will not be displayed. To connect to the hotspot, enter the password „**Vooll1234**“ and configure the WIFI. If the window does not appear automatically, open your browser and enter a random domain address. This will open the Wi-Fi setup window for the LMC.
- Once the LMC is connected to the Internet, please do not disconnect the device from the Internet for at least 15 minutes while it is updating.



10. Back to the quick guide Charging station

Now switch back to the quick guide for the charging station and complete the installation.

Need help with setup or have questions?

